

INTEGRATED CONNECTOR MODULES

Gigabit belMag™

BM01809

- Single port shielded RJ-45 connector with integrated Gigabit Ethernet magnetics
- Compatible with a variety of Gigabit Ethernet transceiver ICs and 10/100Base-TX transceiver ICs
- Operating temperature 0° to +70° C
- Storage temperature -40° to +85° C
- Complies with IEEE 802.3ab standards and all Gigabit Ethernet specifications
- Integrated design conserves valuable board space
- Minimum interwinding breakdown voltage of 1500 Vrms
- Adaptable, modular design provides higher reliability

ELECTRICAL SPECIFICATIONS AT 25° C

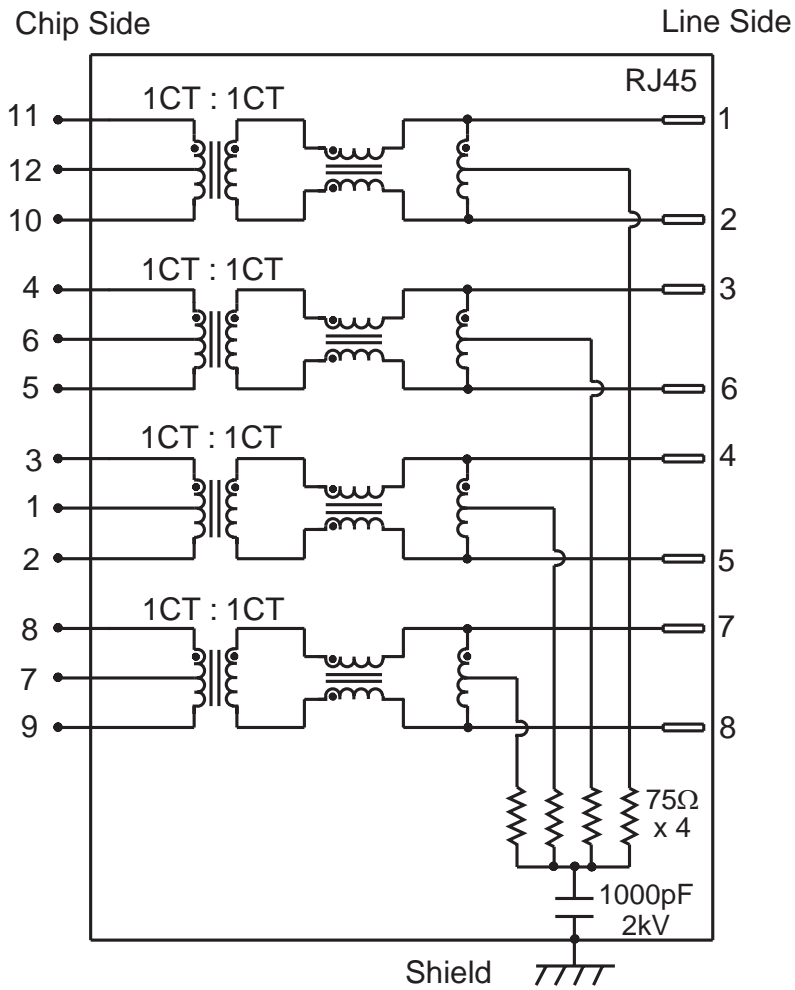
Part Number	Insertion Loss dB max	Return Loss dB min		Common to Differential Mode Rejection dB min	Common to Common Mode Rejection dB min	Crosstalk dB min	Hipot Vrms min
	0.1MHz to 100MHz	0.5MHz to 40MHz	40MHz to 100MHz	100KHz to 100MHz	100KHz to 100MHz		
0813-1X1T-23	-1.0	-18	12 - 20 log (f/80 MHz)	-40	-30	33 - 20 log (f/50MHz)	1500
0816-1X1T-23	-1.0	-18	12 - 20 log (f/80 MHz)	-40	-30	33 - 20 log (f/50MHz)	1500

Available Options

- Various transformer turns ratios
- Various high voltage capacitor values

SCHEMATIC

0813-1X1T-23
0816-1X1T-23



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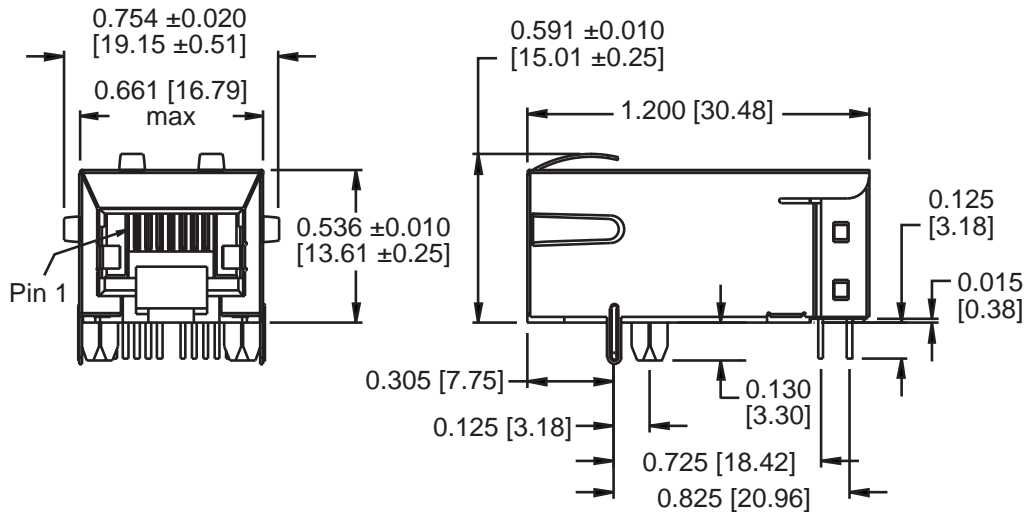
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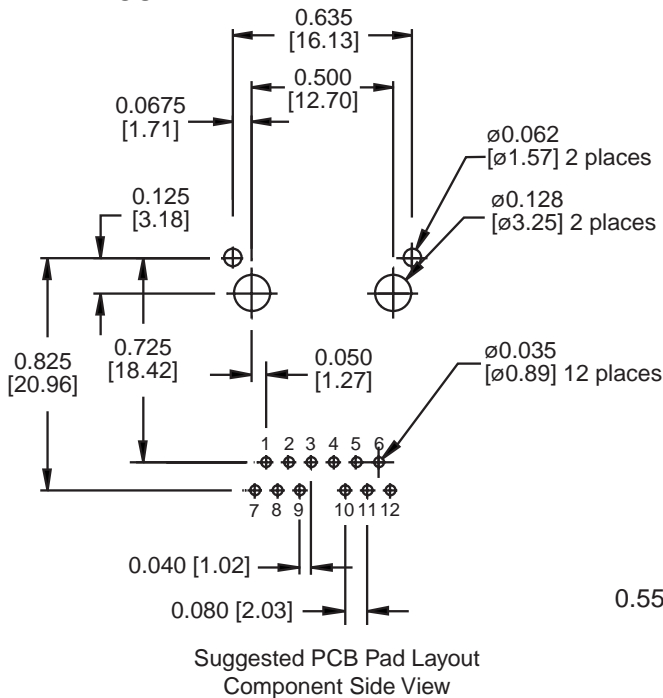
MECHANICAL

0813-1X1T-23



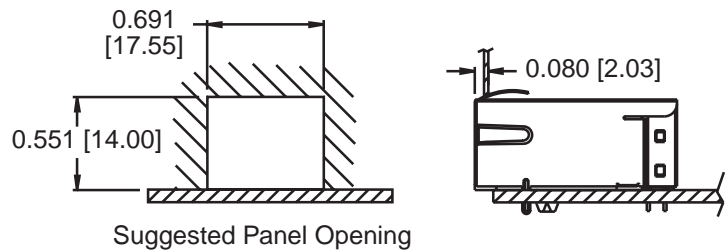
Dimensions are in inches [millimeters].
Standard dimension tolerance is ± 0.010 [0.25] unless otherwise noted.

PAD LAYOUT



Notes

Plastic Housing	Thermoplastic, flammability rating UL 94V-0
Contacts	50 micro-inch hard gold plating
Pins	Tin-coated copper wire, DIA 0.018" [0.46]
Solderability	Per MIL Std. 202, Method 208
Metal Shield	Tin lead plated copper alloy

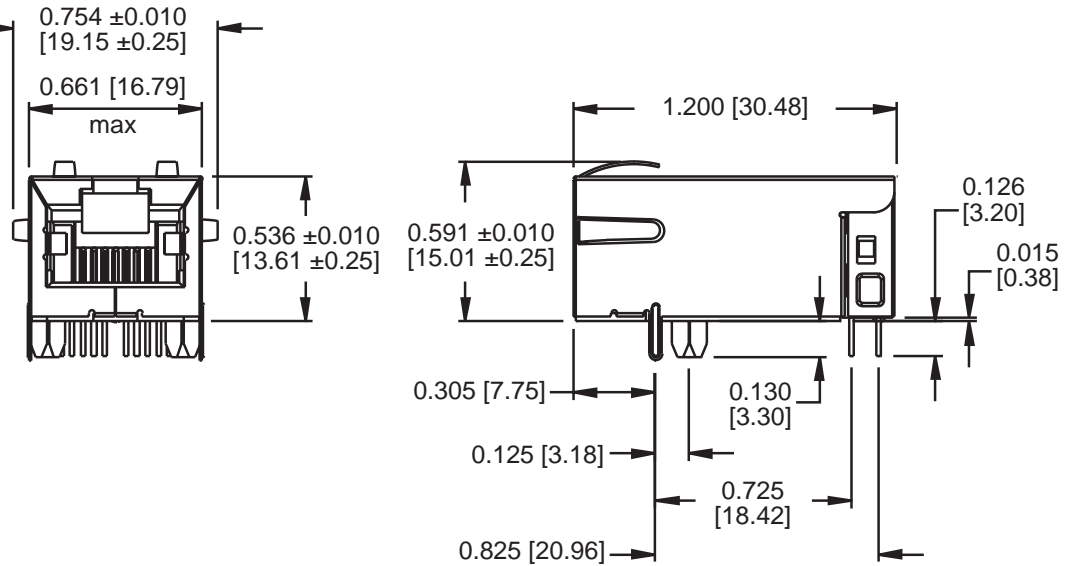


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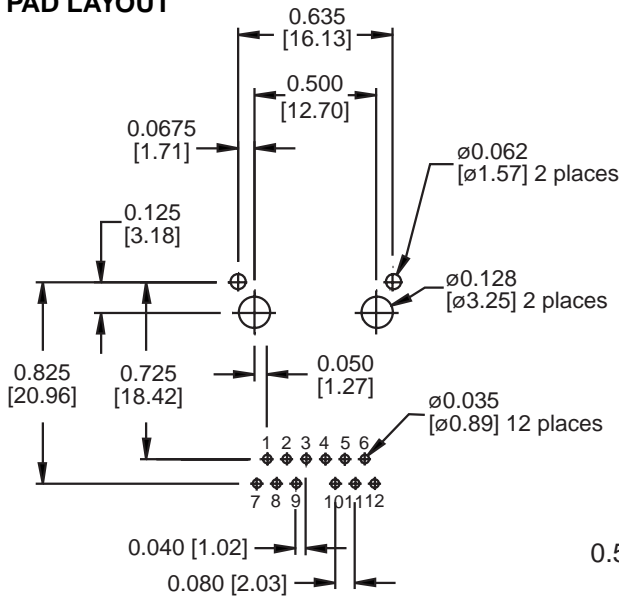
MECHANICAL

0816-1X1T-23



Dimensions are in inches [millimeters].
Standard dimension tolerance is ± 0.010 [0.25] unless otherwise noted.

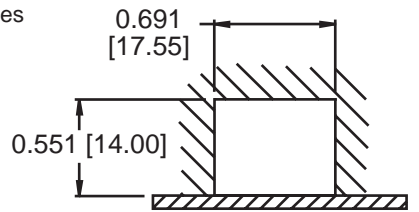
PAD LAYOUT



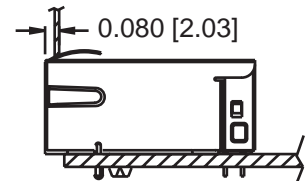
Suggested PCB Pad Layout
Component Side View

Notes

- | | |
|-----------------|---|
| Plastic Housing | Thermoplastic, flammability rating UL 94V-0 |
| Contacts | 50 micro-inch hard gold plating |
| Pins | Tin-coated copper wire, DIA 0.018" [0.46] |
| Solderability | Per MIL Std. 202, Method 208 |
| Metal Shield | Tin lead plated copper alloy |



Suggested Panel Opening



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